Amendments to the claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

Claims 1-26 (cancelled)

27. (New) A method for diagnosing or prognosing Alzheimer's disease in a subject, or determining whether a subject is at increased risk of developing Alzheimer's disease, comprising:

determining a level, or an activity, or both said level and said activity, of nerve growth factor in a sample taken from cerebrospinal fluid of said subject; and

comparing said level, or said activity, or both said level and said activity to a reference value representing a known disease or health status;

wherein an increase in said level, or a varied activity, or both an increase in said level and a varied activity of nerve growth factor in said cerebrospinal fluid from said subject relative to said reference value representing a known health status indicates a diagnosis, or prognosis, or increased risk of Alzheimer's disease in said subject.

28. (New) A method of monitoring progression of Alzheimer's disease in a subject, comprising:

determining a level, or an activity, or both said level and said activity, of nerve growth factor in a sample taken from cerebrospinal fluid of said subject; and

comparing said level, or said activity, or both said level and said activity to a reference value representing a known disease or health status;

wherein an increase in said level, or a varied activity, or both an increase in said level and a varied activity of nerve growth factor in said cerebrospinal fluid from said subject relative to said reference value representing a known health status indicates a diagnosis, or prognosis, or increased risk of Alzheimer's disease in said subject.

29. (currently amended) Use of the method according to claim ~~36~~ 27 for evaluating a treatment for Alzheimer's disease.

30. (New) The method according to claim 27, wherein a level of nerve growth factor ≥ 4 pg/ml in said cerebrospinal fluid indicates a diagnosis, or prognosis, or increased risk of Alzheimer's disease in said subject.

31. (New) The method according to claim 30, wherein a level of nerve growth factor in the range from 4 pg/ml to 25 pg/ml in said cerebrospinal fluid indicates a diagnosis, or prognosis, of increased risk of Alzheimer's disease in said subject.

32. (New) The method according to claim 30, wherein a level of nerve growth factor in the range from 4 pg/ml to 14 pg/ml in said cerebrospinal fluid indicates a diagnosis, or prognosis, or increased risk of Alzheimer's disease in said subject.

33. (New) The method according to claim 27, wherein said subject is a human.

34. (New) The method according to claim 27, wherein nerve growth is detected using an immunoassay, bioassay, and/or binding assay.

35. (New) The method according to claim 27, further comprising repeating said determining step for a series of samples taken from said subject over a period of time and comparing a level

and/or an activity of nerve growth factor in said sample with a level and/or an activity in said series of samples.

36. (New) The method according to claim 35, wherein said subject receives a therapeutic treatment for Alzheimer's disease prior to taking one or more of said samples in said series.

37. (New) The method according to claim 36, wherein said level and/or activity in said samples is determined before and after said treatment of said subject.

38. (New) The method according to claim 27, further comprising:

determining a level, or an activity, or both said level and said activity of a further neurotrophin in a sample taken from cerebrospinal fluid of said subject; and

comparing said level, or said activity, or both said level and said activity to a reference value representing a known disease or health status;

wherein a varied level, or activity, or both said level and said activity of said further neurotrophin in said cerebrospinal fluid from said subject relative to said reference value representing a known health status indicates a diagnosis, or prognosis, or increased risk of Alzheimer's disease in said subject.

39. (New) The method according to claim 38 wherein said neurotrophin is neurotrophin-3.

40. (New) The method according to claim 39 wherein a level of neurotrophin-3 $\geq$ 15 pg/ml in said cerebrospinal fluid indicates a diagnosis, or prognosis, or increased risk of Alzheimer's disease in said subject.

41. (currently amended) A kit for diagnosis, prognosis, or determination of increased risk of developing Alzheimer's disease in a subject, said kit comprising:

a) at least one reagent that detects nerve growth factor; and

b) instructions for diagnosing, or prognosing or determining increased risk of developing Alzheimer's disease by

i) detecting a level, or an activity, or both said level and said activity of nerve growth factor in a sample taken from cerebrospinal fluid of said subject; and

ii) diagnosing, or prognosing, or determining whether said subject is at increased risk of developing Alzheimer's disease,

wherein

an increase in said level, or a varied activity, or both said increase in said level and said varied activity of nerve growth factor compared to a reference value representing a known health status or

a level, or an activity, or both said level and said activity, of nerve growth factor similar or equal to a reference value representing a known disease status

indicates a diagnosis, or prognosis, or increased risk of developing Alzheimer's disease.

42. (New) The kit according to claim 41, wherein a level of nerve growth factor ≥ 4 pg/ml in said cerebrospinal fluid indicates a diagnosis, or prognosis, or increased risk of Alzheimer's disease in said subject.

43. (New) The kit according to claim 42 wherein a level of nerve growth factor in the range from 4 pg/ml to 25 pg/ml in said cerebrospinal fluid indicates a diagnosis, or prognosis, or increased risk of Alzheimer's disease in said subject.

44. (New) The kit according to claim 42 wherein a level of nerve growth factor in the range from 4 pg/ml to 14 pg/ml in said cerebrospinal fluid indicates a diagnosis, or prognosis, or increased risk of Alzheimer's disease in said subject.

45. (New) The kit according to claim 41 further comprising:

a) at least one reagent which detects a further neurotrophin; and

b) instructions for diagnosing, or prognosing Alzheimer's disease, or determining increased risk of developing Alzheimer's disease by

i) detecting a level, or an activity, or both said level and said activity, of said further neurotrophin in a sample taken from cerebrospinal fluid of said subject; and

ii) diagnosing, or prognosing, or determining whether said subject is at increased risk of developing Alzheimer's disease,

wherein

a varied level or activity, or both said level and said activity, of said further neurotrophin compared to a reference value representing a known health status or a level, or an activity, or both said level and said activity, of said further neurotrophin similar or equal to a reference value representing a known disease status

indicates a diagnosis, or prognosis, or increased risk of Alzheimer's disease in said subject.

46. (New) The kit according to claim 45 wherein said neurotrophin is neurotrophin-3.

47. (New) The kit according to claim 46 wherein a level of neurotrophin-3 $\geq$ 15 pg/ml in said cerebrospinal fluid indicates a diagnosis, or prognosis, or increased risk of Alzheimer's disease in said subject.

48. (New) The kit according to claim 41 for use in monitoring a progression of Alzheimer's disease in a subject.

49. (New) The kit according to claim 41 for use in monitoring the success or failure of a therapeutic treatment of a subject for Alzheimer's disease.